

WHAT IS CLAIMED IS:

1. An image processing apparatus comprising:  
an input unit, arranged to input image data;  
an output unit, arranged to output the image data  
5 to an external device; and  
a controller, arranged to control a signal format  
of the image data to be supplied from said input unit  
to said output unit on the basis of a signal format of  
image data that can be processed by said output unit.
- 10 2. The apparatus according to claim 1, wherein said  
controller acquires information related to an input  
signal format of image data that can be input by said  
input unit and information related to an output signal  
format of the image data that can be processed by said  
15 output unit and, on the basis of the acquired  
information related to the input and output signal  
formats, controls the signal format of the image data  
to be supplied from said input unit to said output unit.
- 20 3. The apparatus according to claim 2, further  
comprising a converter, arranged to convert the signal  
format of the image data input from said input unit,  
wherein when image data having a signal format  
corresponding to the output signal format is not input  
25 from said input unit, said controller supplies image  
data obtained by converting the signal format by said  
converter to said output unit.
4. The apparatus according to claim 1, wherein said

input unit comprises an image sensing device for acquiring image data of an object.

5        5.     The apparatus according to claim 1, wherein the signal format includes a colorimetric form, spectral distribution form, and colorimetric and spectral distribution form.

6.     The apparatus according to claim 5, wherein image data having the colorimetric form is RGB data.

7.     The apparatus according to claim 1, wherein said  
10    input unit and/or output unit can be detached.

8.     A control method of an image processing apparatus which has an input unit arranged to input image data and an output unit arranged to output the image data to an external device, comprising the step of:

15        controlling a signal format of the image data to be supplied from the input unit to the output unit on the basis of a signal format of the output unit.

9.     The method according to claim 8, wherein in said  
20    controlling step, information related to an input signal format of image data that can be input by the input unit and information related to an output signal format of the image data that can be processed by the output unit are acquired, and on the basis of the acquired information related to the input and output  
25    signal formats, the signal format of the image data to be supplied from the input unit to the output unit is controlled.

10. The method according to claim 9, further comprising the steps of:

converting the signal format of the image data input from the input unit; and

5 when image data having a signal format corresponding to the output signal format is not input from the input unit, supplying image data obtained by converting the signal format to the output unit.

11. A computer program product storing a computer  
10 readable medium comprising a computer program code, for a control method of an image processing apparatus which has an input unit arranged to input image data and an output unit arranged to output the image data to an external device, comprising process procedure code for  
15 controlling a signal format of the image data to be supplied from the input unit to the output unit on the basis of a signal format of the output unit.

12. The product according to claim 11, wherein in  
said controlling process, information related to an  
20 input signal format of image data that can be input by the input unit and information related to an output signal format of the image data that can be processed by the output unit are acquired, and on the basis of the acquired information related to the input and  
25 output signal formats, the signal format of the image data to be supplied from the input unit to the output unit is controlled.

13. The product according to claim 12, further comprising process procedure code for:

converting the signal format of the image data input from the input unit; and

- 5       when image data having a signal format corresponding to the output signal format is not input from the input unit, supplying image data obtained by converting the signal format to the output unit.